



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/657,778

09/08/2003

Rohit Verma

99,449-A

1362

20306

7590

07/19/2006

MCDONNELL BOEHNEN HULBERT & BERGHOFF LLP  
300 S. WACKER DRIVE  
32ND FLOOR  
CHICAGO, IL 60606

EXAMINER

VU, THONG H

ART UNIT

PAPER NUMBER

2142

DATE MAILED: 07/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/657,778

Applicant(s)

VERMA ET AL.

Examiner

Thong H. Vu

Art Unit

2142

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 September 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                            |                                                                                         |
|--------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                                       | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>12/03</u> . | 6) <input type="checkbox"/> Other: _____                                                |

Art Unit: 2142

1. Claims 1-20 are pending.
2. This application is a CON of 09/514,108 filed 2/28/2000 now is USP 6,654,792.

### ***Double Patenting***

3. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-3,11-13 are rejected on the ground of nonstatutory double patenting over claims 1-16 of U. S. Patent No. 6,463,475 B1 ('475) since the claims, if allowed, would improperly extend the "right to exclude" already granted in the patent.

The subject matter claimed in the instant application is fully disclosed in the patent and is covered by the patent since the patent and the application are claiming common subject matter, as follows:

Art Unit: 2142

(‘475) 1. A method of consolidating control of a tunnel connection from an originating user to a destination without specifically requiring the originating user to provide a destination address comprising the steps of:

receiving an incoming tunnel connection via L2TP from the originating user;  
identifying the destination address according to the originating user and independent of specifically requiring address information from the originating user;  
determining whether a switched tunnel connection needs to be made to the destination in accordance with information relating to the originating user;  
and intelligently initiating a switched tunnel connection via L2TP for switching traffic from the incoming tunnel connection to the destination over the switched tunnel connection.

5. The method of claim 1 wherein the determining step further comprises translating a destination address to switch the switched tunnel connection to the destination.

(Application) A tunnel endpoint device comprising:

a network interface connected to a local area network having a cluster of tunnel endpoint devices, the tunnel endpoint device being one of the cluster, the network interface configured to receive a Start-control-connection-Request (SCCRQ) message via the local area network to initiate establishment of a tunnel connection, wherein the SCCRQ includes a destination address field modified to be set to a local address of the tunnel endpoint device and a tunnel ID value assigned by a tunnel initiator to the tunnel connection being set-up;  
means for forming a Start-control-connection-Reply (SCCRP) message having an address of the tunnel initiator, the tunnel ID value assigned to the tunnel connection by the tunnel initiator, and a tunnel ID value assigned to the tunnel connection by the tunnel endpoint device; and  
means for transmitting the SCCRCP message to a network address translation server via the network interface.

Furthermore, there is no apparent reason why applicant was prevented from presenting claims corresponding to those of the instant application during prosecution of the application which matured into a patent. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

Art Unit: 2142

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 11-13 are rejected under 35 U.S.C. 102(e) as being anticipated by Chuah et al [Chuah 6,449,272 B1].

4. As per claim 1, Chuah discloses a tunnel endpoint device comprising:

a network interface connected to a local area network having a cluster (i.e.: router, gateway) of tunnel endpoint devices (i.e.: secured network, L2TP), the tunnel endpoint device being one of the cluster, the network interface configured to receive a Start-Control-Connection-Request (SCCRQ) message via the local area network to initiate establishment of a tunnel connection (i.e.: a secure link), wherein the SCCRQ includes a destination address field modified to be set to a local address of the tunnel endpoint device and a tunnel ID value assigned by a tunnel initiator (i.e.: source/ local/ home node) to the tunnel connection being set-up [Chuah, L2TP, col 3 lines 22-35; tunnel ID, col 5 lines 45-63; SCCRQ, col 7 lines 5-25; IP address of Anchor LAC, col 9 lines 10-32];

means for forming a Start-control-connection-Reply (SCCRP) message having an address of the tunnel initiator, the tunnel ID value assigned to the tunnel connection by the tunnel initiator, and a tunnel ID value assigned to the tunnel connection by the tunnel endpoint device [Chuah, SCCRQ, col 7 lines 5-col 8 line 17; tunnel ID, col 5 lines 45-63]; and

means for transmitting the SCCRP message to a network address translation server (i.e.: router) via the network interface [Chuah, SCCRP, router col 7 lines 5-25; Fig 1-2, 5-15].

5. As per claim 2, Chuah discloses receiving a Start-control-connection-connected (SCCN) message to establish a tunnel connection between the tunnel initiator and the tunnel endpoint device [Chuah, SCCN, col 7 lines 5-col 8 line 17].

6. As per claim 3, Chuah discloses forming load status messages that indicate a current traffic load of the tunnel endpoint device [Chuah, current Nr,Ns,Sr,Ss values, col 12 lines 36-64].

7. Claims 11-13 contain the similar limitations set forth in claims 1-3. Therefore claims 11-13 are rejected for the same rationale set forth in claims 1-3.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 4-10,14-20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Chuah et al [Chuah 6,449,272 B1] in view of Aldelman et al [Adelman 6,006,259].

Art Unit: 2142

8. As per claim 4, Chuah discloses A cluster (master) device comprising:  
a first interface coupled to a first network having a plurality of network devices;  
a a second interface for communicating with a second network, wherein the cluster (master) device has a (master) global address that is unique on the second network (i.e.: IP address), and wherein the cluster (master) device is configured to receive from the second network tunnel connection request messages having the (master) global address in a destination address field and, for each tunnel connection request message received [Chuah, L2TP, col 3 lines 22-35; tunnel ID, col 5 lines 45-63; SCCRQ, col 7 lines 5-25; IP address of Anchor LAC, col 9 lines 10-32]:

(i) select one of the plurality of network devices; (ii) insert a local address for the selected network device into the destination address field of the received tunnel connection request message; and (iii) transmit the received tunnel connection request message as modified over the first network interface onto the first network [Chuah, SCCRP; modified message before relay, col 7 lines 5-col 8 line 17].

However Chuah does not explicitly detail the cluster device or router as a cluster master device.

In the same endeavor, Adelman discloses a IP network clustering system wherein a master unit in the cluster providing a filter mechanism, using L2TP and tunnel ID [Adelman, col 3 lines 10-30; col 10 lines 30-35]

Therefore it would have been obvious to an ordinary skill in the art at the time the invention was made to incorporate the master device to control or filter the activities of a

Art Unit: 2142

plurality of network devices as taught by Adelman into the Chuah's apparatus in order to utilize the cluster of tunneling devices

Doing so would provide efficient IP network cluster capability along with combined scalability, load balancing and controlled TCP fail-over [Adelman, col 2 lines 36-48].

9. As per claim 5, Chuah-Adelman disclose the cluster master device selects one of the plurality of network devices based on a traffic load of each network device [Adelman, a cluster master unit, col 3 lines 10-30; col 10 lines 30-35].

10. As per claim 6, Chuah-Adelman disclose the cluster master device receives load status messages from each network device and assigns the received tunnel connection request message to the network device that currently has the lowest traffic load as indicated by the load status messages [Adelman, a cluster master unit, col 3 lines 10-30; col 10 lines 30-35].

11. As per claim 7, Chuah-Adelman disclose the tunnel connections are Layer 2 Tunneling Protocol (L2TP) connections [Chuah, L2TP, col 3 lines 22-35].

12. As per claim 8, Chuah-Adelman disclose the first network is a local area network (LAN) and the second network is an Internet protocol (IP) network [Chuah, LAN A-B, Internet, Fig1].



Art Unit: 2142

13. As per claim 9, Chuah-Adelman disclose the tunnel connection request messages include a source address field set to an IP address of a tunnel initiator, and a source tunnel ID field set to a tunnel ID value assigned to the tunnel connection by the tunnel initiator [Chuah, tunnel ID, col 5 lines 45-63].

14. As per claim 10, Chuah-Adelman disclose the cluster master device keeps track of network devices that are out of service or temporarily inactive [Adelman, a cluster master unit, col 3 lines 10-30; col 10 lines 30-35].

15. Claims 14-20 contain the similar limitations set forth in claims 4-10. Therefore claims 14-20 are rejected for the same rationale set forth in claims 4-10.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to examiner *Thong Vu*, whose telephone number is (571)-272-3904. The examiner can normally be reached on Monday-Thursday from 6:00AM- 3:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, *Andrew Caldwell*, can be reached at (571) 272-3868. The fax number for the organization where this application or proceeding is assigned is 571-273-8300

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval IPAIRI system. Status information for published applications may be obtained from either Private PMR or Public PMR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*Thong Vu*  
**Primary Examiner**  
**Art Unit 2142**

